



DEQ 101

DRINKING WATER

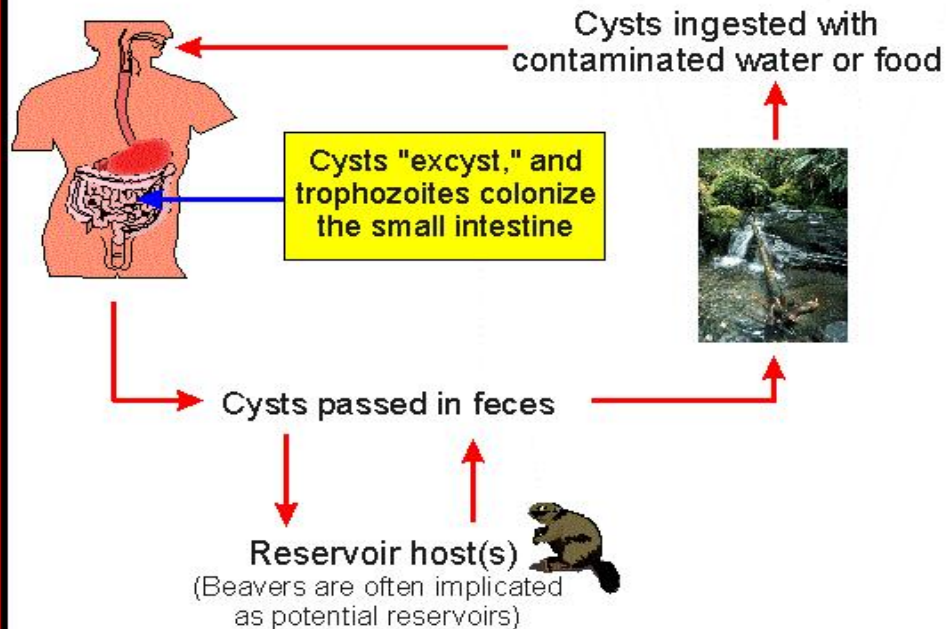


Kevin Brown,
Director



OUR MISSION

THE LIFE CYCLE OF *GIARDIA LAMBLIA* (the causative agent of giardiasis)



(Parasites and Parasitological Resources)

To protect the public from waterborne risks through education, assistance, and oversight.

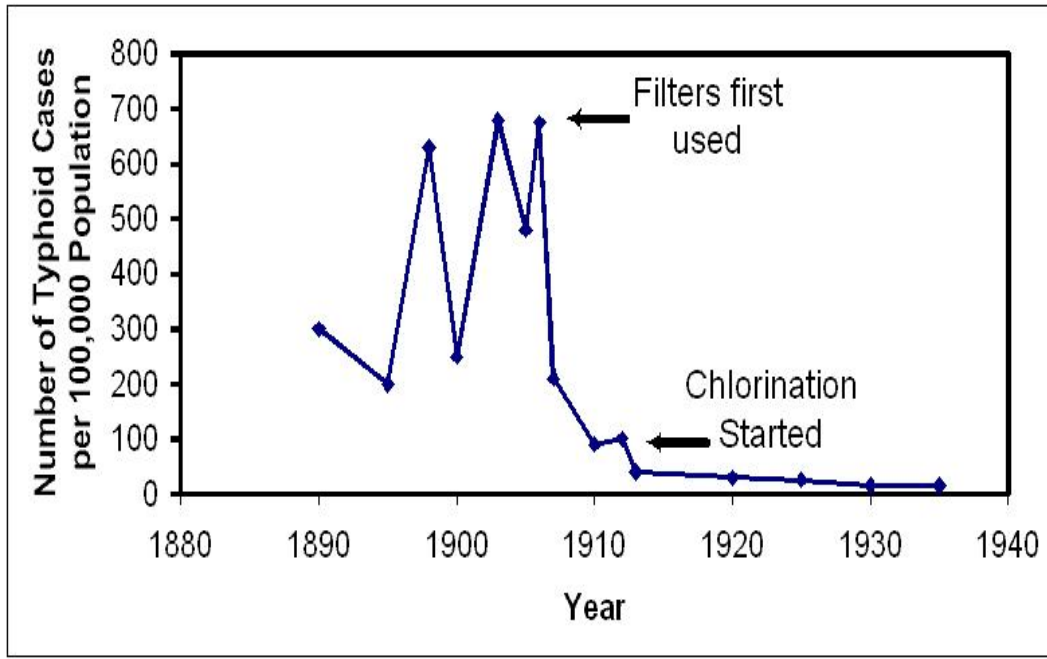


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STATUTORY AUTHORITIES

Typhoid Cases from 1890 to 1940



- Federal Safe Drinking Water Act
- State Safe Drinking Water Act

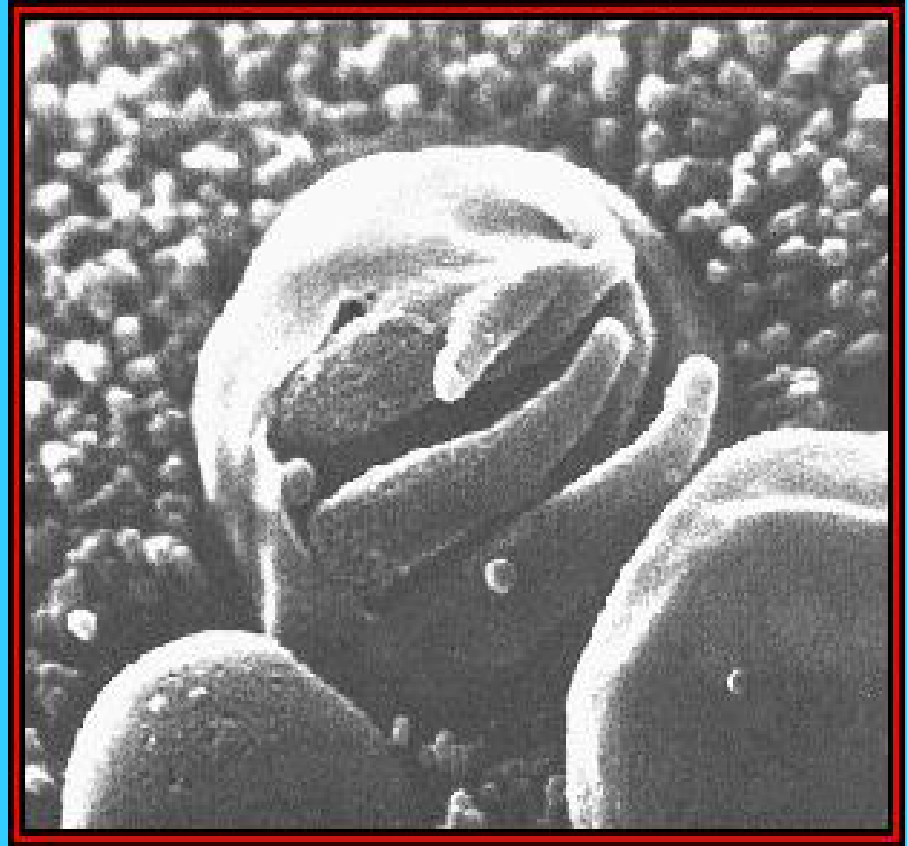


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OUR RESPONSIBILITIES

- Oversee 950 water systems serving at least 15 connections or 25 people
- Oversee 1,850 water sources



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STATE RULES COVER:

- Infrastructure improvement loan program
- Construction standards, source development, distribution, storage, treatment
- Flow rates (average, peak)



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STATE RULES COVER:

Monitoring requirements - 90+ contaminants

Maximum contaminant level exceedance

Source water protection

Operator certification

Backflow contamination/cross connections



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Water Systems must monitor for these contaminant groups:

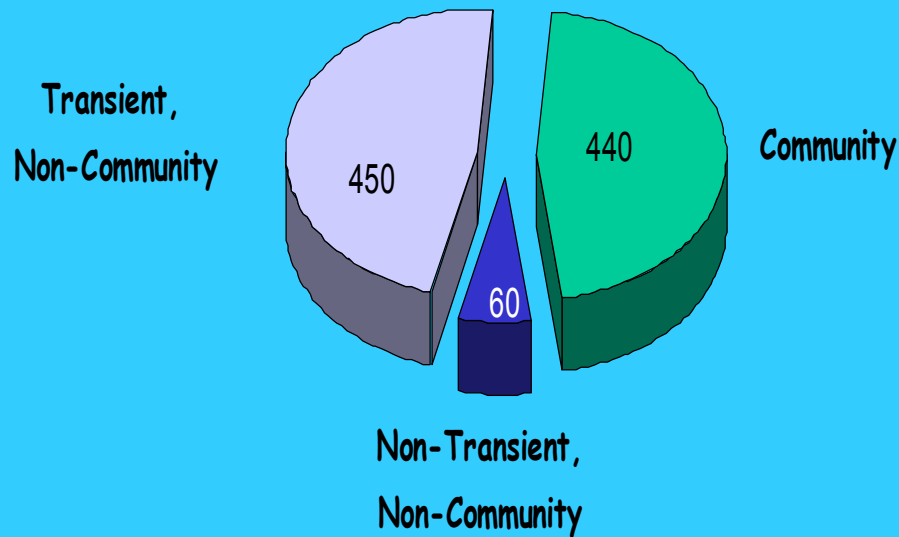
- ❖ Microbiological
(Total Coliform, *Giardia*, *Cryptosporidium*)
- ❖ Radiological
- ❖ Organic chemicals
- ❖ Inorganic elements
- ❖ Physical characteristics



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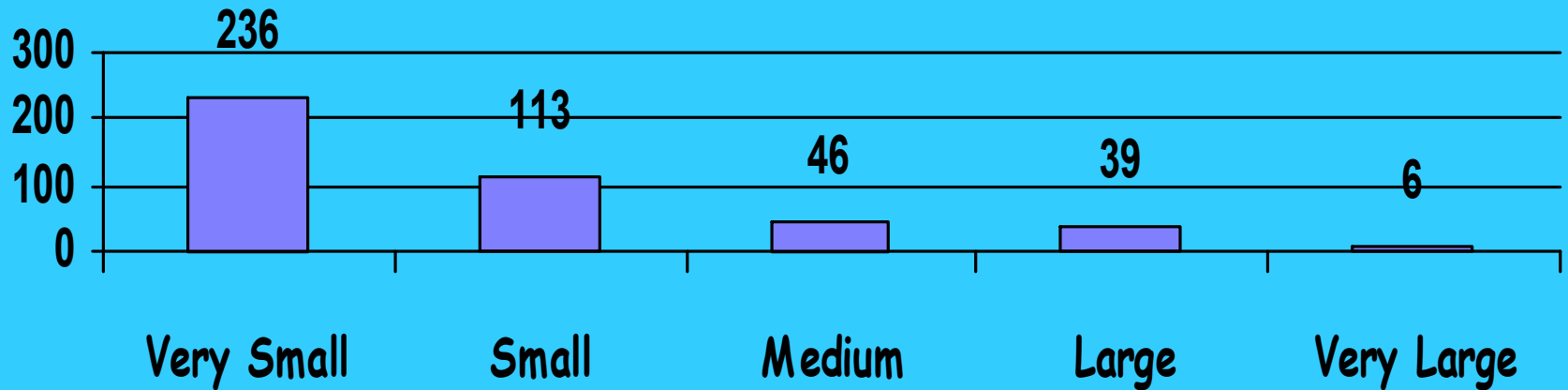
Public Systems by Type Category



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NUMBER OF COMMUNITY SYSTEMS:

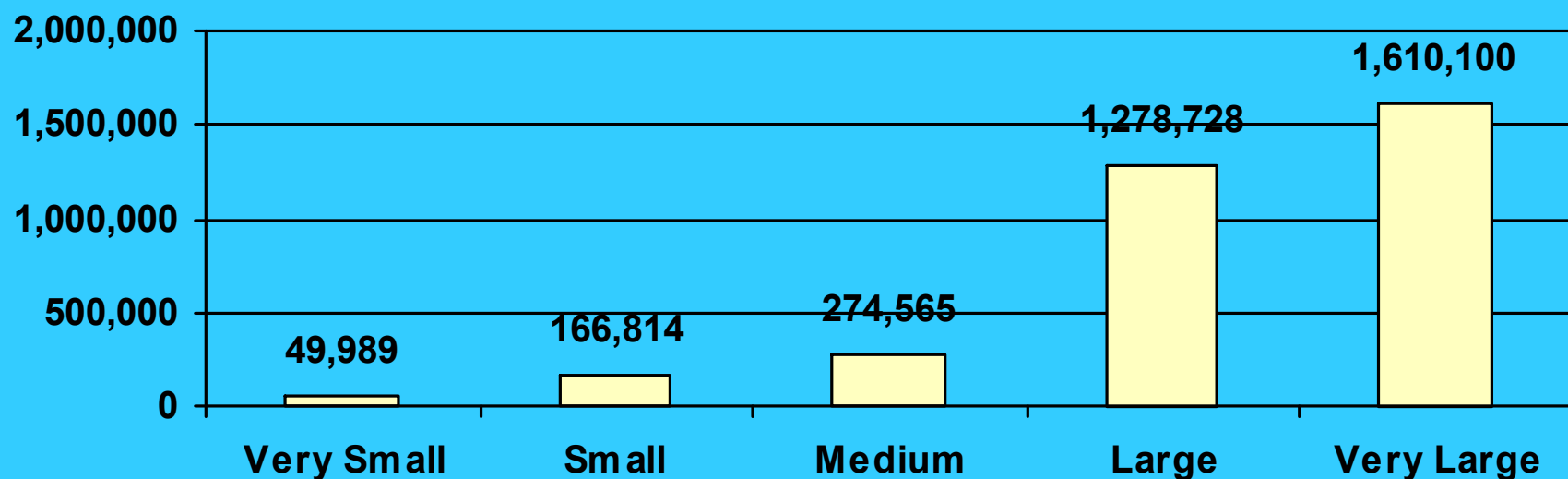


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POPULATION POTENTIALLY SERVED:

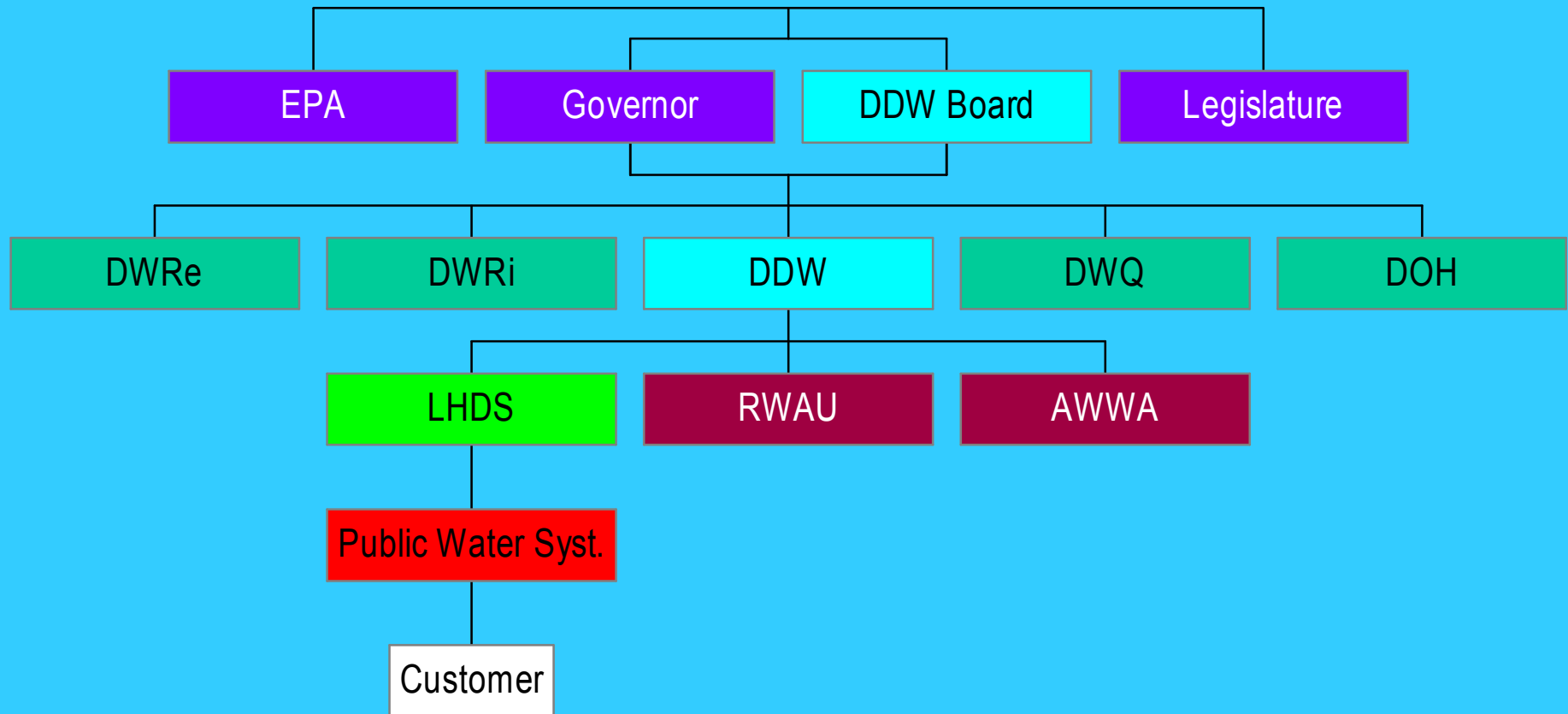
By Community System



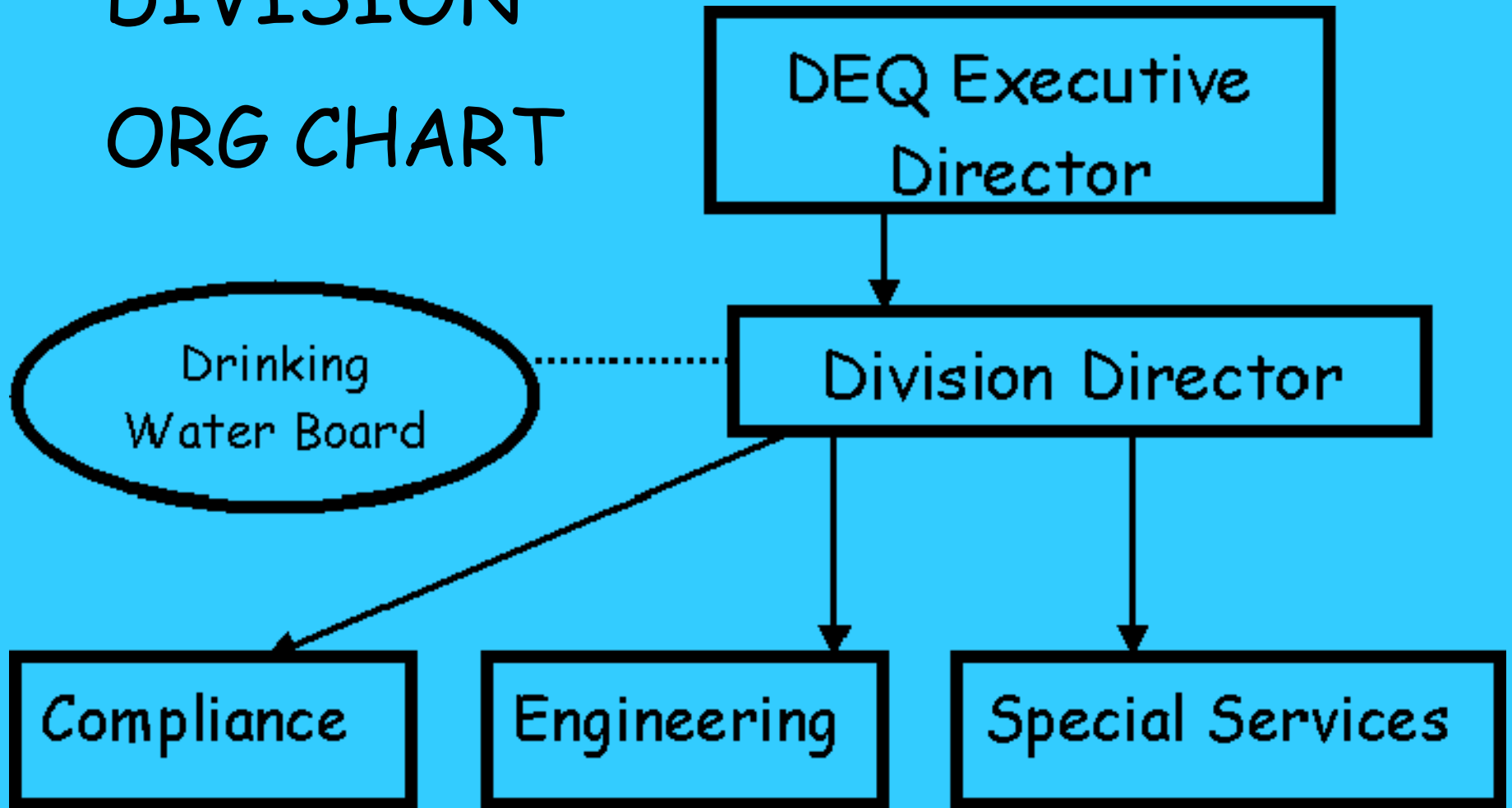
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STATE WATER ORGANIZATION



DIVISION ORG CHART



DIRECTOR'S OFFICE

Three Staff Members

Primary customer service contact

Long-term planning

Director serves as Drinking Water Board
Executive Secretary

Plan approvals (construction, source protection)



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COMPLIANCE SECTION

Fourteen Staff Members

Drinking water compliance - 25+ EPA rules

Operation certification

Emergency response/Homeland Security

Sanitary surveys

Cross-connection control/backflow prevention
(Illegal/improper connections to water systems)



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ENGINEERING SECTION

Fourteen Staff Members

Financial assistance (\$10,000,000/year)

Plan and specification review

Construction, treatment plant inspections

Technical assistance



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SPECIAL SERVICES SECTION

Six Staff Members

- Source water protection
- Treatment plant technical assistance



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NUMBERS



- ✓ ~ 90 contaminants monitored
- ✓ 74 water treatment plants (surface water)
- ✓ 1,030 well sources
- ✓ 739 spring sources
- ✓ 21 tunnel sources



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More Numbers...

95.4% - Public Water Systems with approved rating

99.9% - Citizens drink water from an approved source

90% - Community systems with source protection plans



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And More Numbers...

- 100,000+ - Pieces of information (mainly laboratory analyses) handled per year.
- 400 - Plans reviewed per year.
- 250 - Sanitary surveys conducted per year (with local health departments and forest service assistance)
- 1,950 - Certified water system operators



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CURRENT ISSUES

Not-approved water systems

Safe Drinking Water Act implementation (new federal rules)

Database conversion/data management

Public awareness of cross connections (shoddy plumbing-dishwashers, water softners, lawn irrigation systems, secondary irrigation systems)

Water conservation

Electronic document management system



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For more information:

www.drinkingwater.utah.gov



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